Concrete Coat *Si*

OBTEGO®
Innovative Surface Protection

1-Component Hybrid Coating based on Silicium

Description
Concrete Coat *Si* is a one component hybrid coating for the protection of cementitious surfaces. The product is based on a new hybrid-binder technology. Coat *Si* is available in transparent and colored version.

Properties
Concrete Coat *Si* reacts with humidity and cures at room temperature. The product is free of solvents and plasticizers, diffusible and insensitive to surfaces with higher residual moisture. Compared to many other coatings, Concrete Coat *Si* can be used both indoors and outdoors. In case of mechanical damage, the product can be painted over at any time. (provided that surface was cleaned).

The product protects the surface against the penetration of aqueous liquids as well as oils, fats and other dirt. Surfaces are therefore easier to clean.

The surface treatment Concrete Coat *Si* is suitable for a wide range of applications. From new concrete floors to inhomogeneous concrete surfaces to old concrete floors which has to be refurbished.

Applications
Concrete Coat *Si* can be used on absorbent, monolithic concrete floors, screeds and self-leveling compounds, and much more. Onto extremely power troweled and very dense floor surfaces limited use (may require grinding or choose another OBTEGO solution). Areas of application e.g. storage and logistics areas, production areas, workshops, etc.

Note: The product has very good resistance to many chemicals. A short test overview is listed in the Coat *Si* brochure. If there is intensive exposure to solvents or alkaline fluids, make a sample area and test its suitability. Due to the low layer thickness, the surface may need to be refreshed from time to time in areas with heavy wear.

Processing
The surface to be treated must be dry, solid, clean, absorbent and free of sinter layers, oil, grease and other contaminants that act as release agents. Processing on a surface with increased residual moisture is usually unproblematic, but if you are inexperienced with the product, you should make a test on the floor before. To prepare the surface, at least intensive wet cleaning with coarse (e.g. black) cleaning pads is required. In the case of hard sinter layers or very dense surfaces, grinding or brushing (steel brushes) has to be required. After grinding/brushing, the surface should be wet cleaned several times with an auto-scrubber machine.

To determine consumption, it is recommended to create a separate sample area of the same surface. Stir the one-component product in the delivered container well with an electric stirrer before use. (Be careful of sediment!)

Repot the required amount into a separate bucket. Close immediately the original container to avoid skin formation on the material surface due to humidity!

The product should be applied homogenously to the floor with a short-pile roller (microfiber or nylon, e.g. pile length 6-10mm) (use paint grid!). For a uniform result, usually one pass in a crosswise application is sufficient. For larger areas, it is also advisable to have a second person back rolling to avoid roller marks or traces of approaches. A second coat is recommended for absorbent or rougher surfaces and for better mechanical resistance. The drying time between the two applications is around 1-3 hours, depending on site temperature conditions. If conditions on site are inconvenient, a longer drying time can be expected. Depending on the surface, slight roller marks or marks in scattered light cannot be ruled out.

Note: Protect adjacent surfaces against splashes. Clean tools and equipment with a suitable solvent (e.g. acetone, ethyl acetate, alcohols, etc.).

Working temperature
Avoid working in direct sunlight. The temperature of the surface to be treated should be between 10 °C and 25 °C. At cool temperatures, longer drying times should be planned. Protect fresh surfaces against condensation and other direct water entry.

Drying time
The drying time (walk-on) is approx. 2-3 hours. Depending on the ambient temperature and humidity, the drying time may vary. Mechanically resilient after approx. 48 hours.

Ensure adequate ventilation during drying. The finished surfaces must be protected from too much moisture and especially water until they have hardened sufficiently (3 days). The use of highly alkaline basic cleaners should be avoided within the first 6 months. Even later, only use alkaline cleaners in small doses if necessary.

If the treated floor needs to be covered, this may only be done with a vapor-permeable cover and after it has completely dried. Recommendation: breathable fleece. If necessary, additionally with hardboard or generally with a diffusion-permeable protective cover such as Hammerfest from the company “Protect & Cover” or comparable.

Economy
Use the following values as references depending on absorbency. Guidelines:

Power troweled surfaces: approx. 0,15–0,25 kg/m² (for 2 coats)
Rough surfaces: approx. 0,25–0,35 kg/m² (for 2 coats)

Storage
Protect from freezing. Store closed in a dry place; storable for approx. 12 months in original container at 10 - 25° Celsius.

Environmental protection
Avoid discharge into drains. Water hazard class WGK 1 (low hazard to waters).

Waste codes/waste designations according to EWC/AVV: 08 02 99 wastes from MFSU of other coatings (including ceramic materials): Wastes not otherwise specified. Dispose of waste according to applicable legislation. Completely emptied packages can be recycled.

Safety
Concrete Coat *Si* is non-hazardous to health when dry. Ventilate during and after working. Material safety data sheet available for professional users upon request.

Ingredients:
Binder, silane, pigments (colored version), filler

Labelling according to Regulation (EC) No. 1272/2008 [CLP].

May cause an allergic skin reaction. Causes serious eye damage. Do not breathe dust/fume/gas/mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/attention.

Packaging units (PU)
Tinplate can: 12 kg

Colours: transparent, window grey, silver grey, signal grey, dust grey, basalt grey, pebble grey (no RAL colors)